CHAPTER 7

INFORMATION OPERATIONS

Information is the key to successful militaty operations; strategically, operationally, tactically, and technically. From war to OOTW, the adversaty who wins the /formation War prevails.

—GEN (RET) Glenn Otis, 1991

This chapter describes and sets the doctrinal foundation for IEW support to information operations. The military operations of the future will leverage technology to distort or restrict the adversaries perception of the battlefield while protecting our own. Using all the principles discussed in preceding chapters, IEW will support the commander in winning the information war.

The effectiveness of information operations is predicated on a thorough understanding of the enemy, his C^2 system, and his decision making process. At all levels of war, the Intelligence BOS is an operational tool that assesses and exploits the vulnerabiiities of the enemy's information and C^2 systems. IEW is an integral player in C^2W and information operations. Its lead role in building information system IPB, developing C^2W COASs and assessing the effectiveness of information operations has taken Ml from a support to an operational role in military operations. IEW operations set the conditions for decisive maneuver.

INFORMATION AGE AND IEW

Operation Desert Storm and other recent operations have shown that the nature of warfare has changed dramatically with the arrival of the information age. The information age is characterized by the proliferation of information systems and the increasing ability to rapidly collect, assimilate, and disseminate information. In the information age, those with access to, or control of, these systems can immediately influence public opinion, world commerce, political dialogue, and other issues affecting the security of nations. The impact of the information age on military operations has caused a revolutionary change in the way US Forces conduct operations and the nature of warfare itself. The key to this modern form of warfare is knowledge-based operations. The key to successful knowledge-based operations is exploiting and controlling information.

The information age has changed the conduct of IEW operations. Though MI can extend current IEW support to information operations, there are several aspects of information warfare that will generate new or more detailed IEW requirements. MI must—

- Learn and refine the capability to find and identify the vulnerabilities in the critical nodes of an adversary's decision making system.
- Monitor the information warfare capabilities of potential adversaries and assess this capability as a threat to friendly battle command systems.

- Develop the analytical skills necessary to identify, depict, and exploit the information base of the opposing commander's decision making process and the global information environment.

- Ensure IEW operations effectively support the development and maintenance of the commander's common picture of the battlefield.

- Refine the methods to synchronize IEW operations of fully-modernized, digitized forces with other forces--our own, other services, and allies.

MI must have a thorough understanding of the enemy C^2 structure and his decision making process to effectively support the development and maintenance of the commander's common picture of the battlefield. Information operations will require new analytic and synthesis techniques that describe the enemy C^2 information infrastructure in terms of the enemy commander's decision making process, and the critical nodes that allow him to exercise effective C^2 of his combat forces. Inherent is the requirement to understand how the enemy commander will be affected by specific C^2W actions and predict his response.

Another impact on the intelligence system is the need to assess the effectiveness of the information operations effort. This "electronic" BDA **will** allow commanders to adjust their efforts to maximize the effects on the enemy. An important aspect of this "electronic" BDA will be real-time analysis and synthesis to determine when information operations have created a vulnerability in the enemy C^2 structure that can be exploited by fire and maneuver. Information operations pose a unique challenge to BDA because the effects of C^2W on the enemy C^2 may not be in the form of physical damage.

INFORMATION WARFARE

The battlefield is a scene of constant chaos. The winner will be the one that best controls that chaos, both his and that of his enemy.
—Napoleon Bonaparte, 1769-1821

The concept of information warfare states that knowledge is becoming the Army's center of gravity. Technology now allows us to improve our commander's knowledge base while we diminish and degrade the quantity and quality of the enemy commander's knowledge base. A primary measure of effectiveness in this type warfare is the commander's decision making cycle. The intelligence system plays a vital role on both sides of this equation. On the friendly side, the ability to produce a common, coherent, real-time picture of the battlefield helps to reduce uncertainty and shorten the decision making process, while effective C^2W operations significantly increase and distort the enemy's decision making cycle. Figure 7-1 illustrates some aspects of this new operational environment.

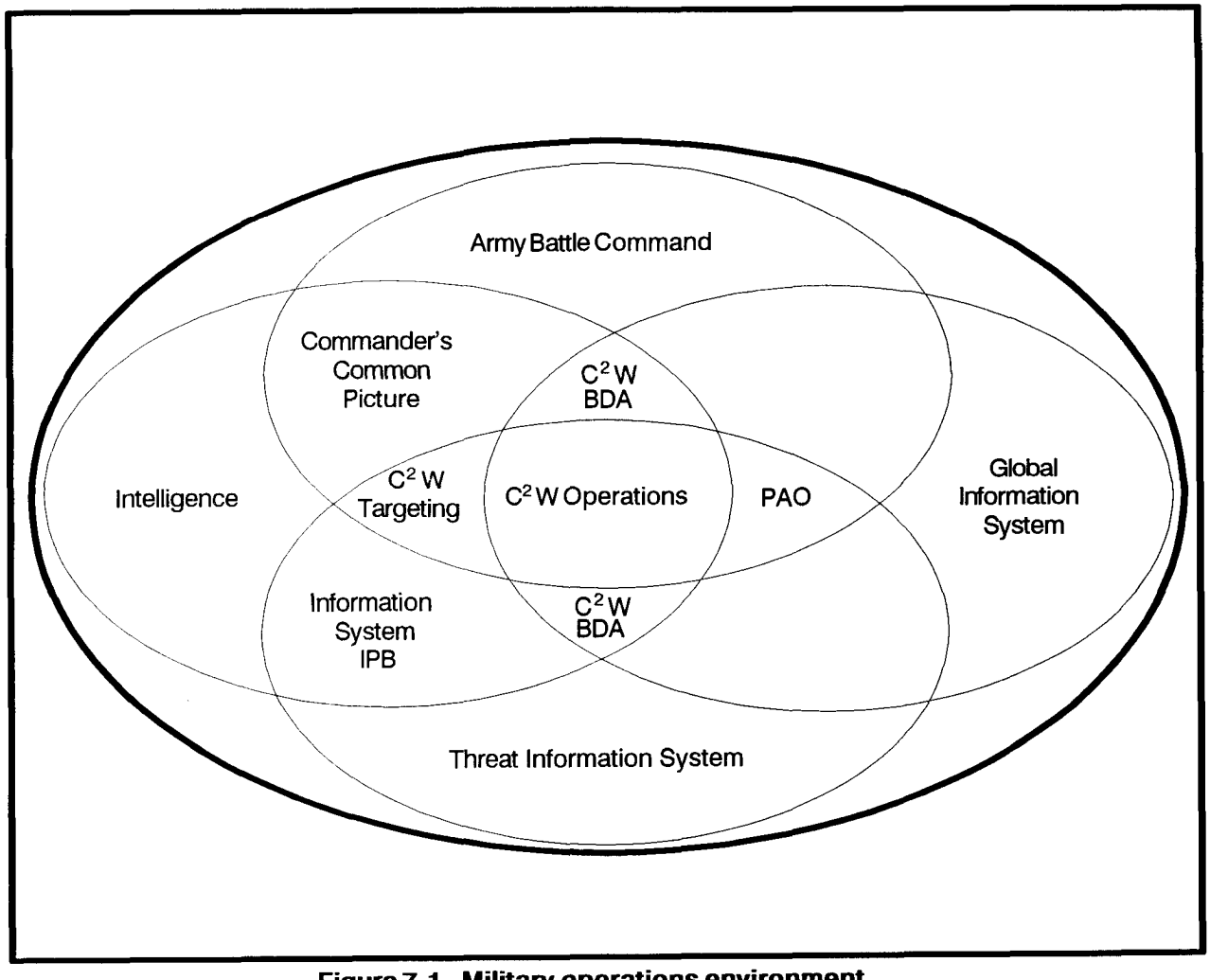

Figure 7-1. Military operations environment.

INFORMATION OPERATIONS

Information operations are the way the Army will prepare and execute knowledge-based warfare across the full range of military operations. Information operations are essential to winning the information war on the future battlefield, and IEW is the key to successful information operations. information operations enable, enhance, and protect the commander's decision making cycle while influencing an opponents. This is accomplished through effective intelligence, battle command, and C^2W operations as an integral part of joint, combined, or interagency operations. Battle command is about imposing control on the compressed dimensions of battle space by achieving and sustaining a high tempo of operations, overwhelming lethality, and superior survivability. Supporting battle command, information operations are conducted across the full range of military operations.

In peacetime, information operations are conducted at various levels of intensity against assorted adversaries. In 00TW situations where restraint is often required, nonlethal C^2W is used to bring about a desired response from threat forces. In cases where the use of force is unavoidable, all elements of information operations are employed in concert to best achieve the objective. The effective pairing of the attack means with the information operation's targets is largely dependent on understanding and predicting the impact of the targeting effort on the adversary's decision making process.

The IEW battle space is frequently global as was demonstrated in Operation Desert Storm. The vast array of systems and sources available to the intelligence community will require a universal vision of the battlefield as shown in Figure 7-2. This vision is crucial in providing the analytical perspective required to give commanders a common picture of the battlefield. The commander's ability to increase the quality of his decisions and compress his decision making process is directly related to his ability to visualize current and future situations. This common picture binds the intelligence and battle command functions together.

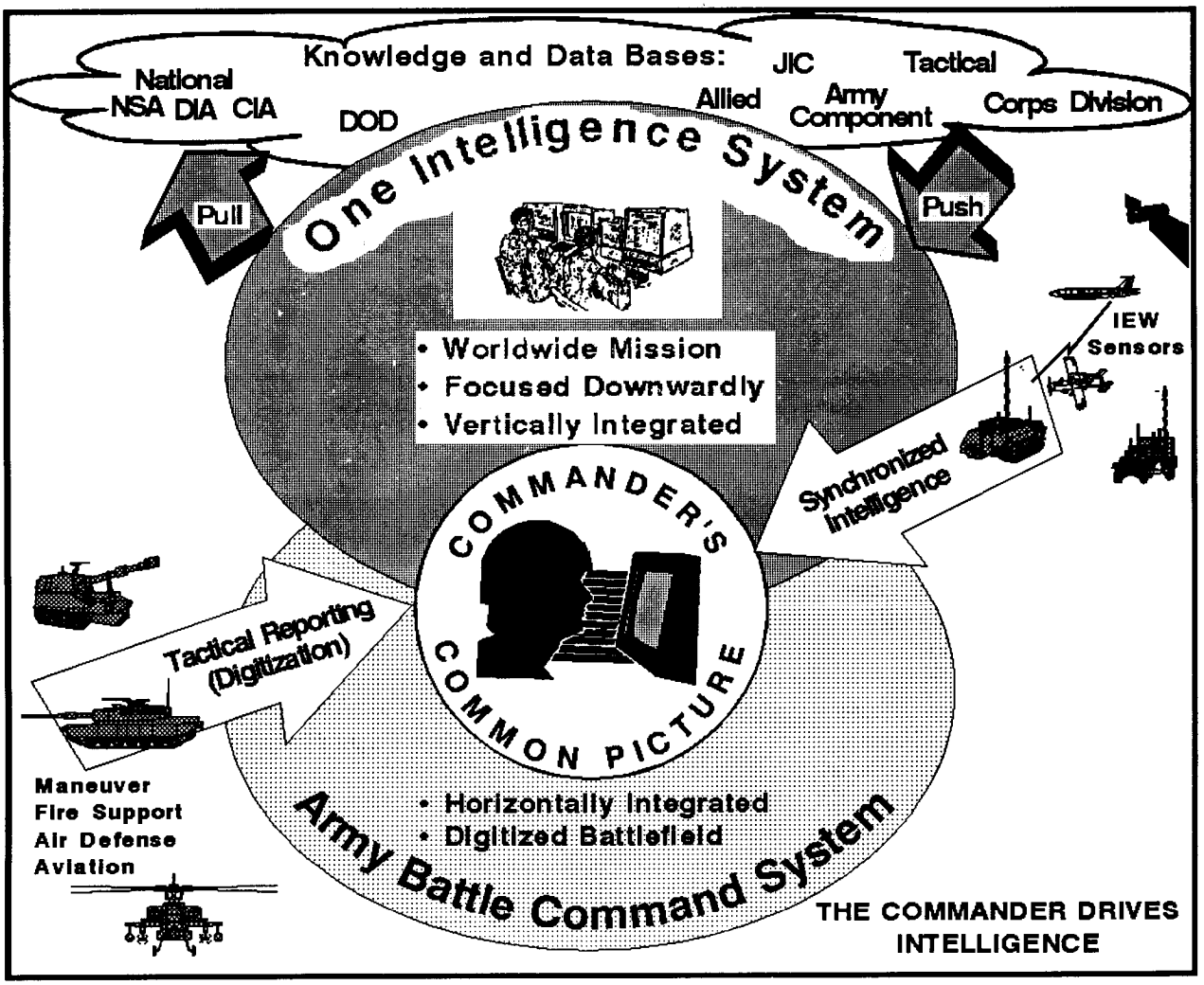

Figure 7-2. IEW battle space.

COMMAND AND CONTROL WARFARE

C^2W is knowledge-based and decision oriented. It is characterized by fast-paced moves and countermoves by opposing commanders. The HVTS in C^2W are the commander's decision making processes. The objectives in C^2W are to allow friendly commanders to make better decisions rapidly (inside the threat commander's decision making cycle), while causing the enemy to make bad decisions. See Figure 7-3. C^2W integrates OPSEC, military deception, PSYOP, EW, and physical destruction with mutually supported intelligence to deny information, and to influence, degrade, or destroy adversary C^2 capabilities while protecting friendly C^2 capabilities. The C^2W part of information operations is not a system. It is a strategy that applies the primary C^2W components to reduce the adversary's C^2 capabilities (counter-C^2) while protecting friendly C^2 capabilities (C^2-protect). It applies across the full range of military operations and at all levels of war.

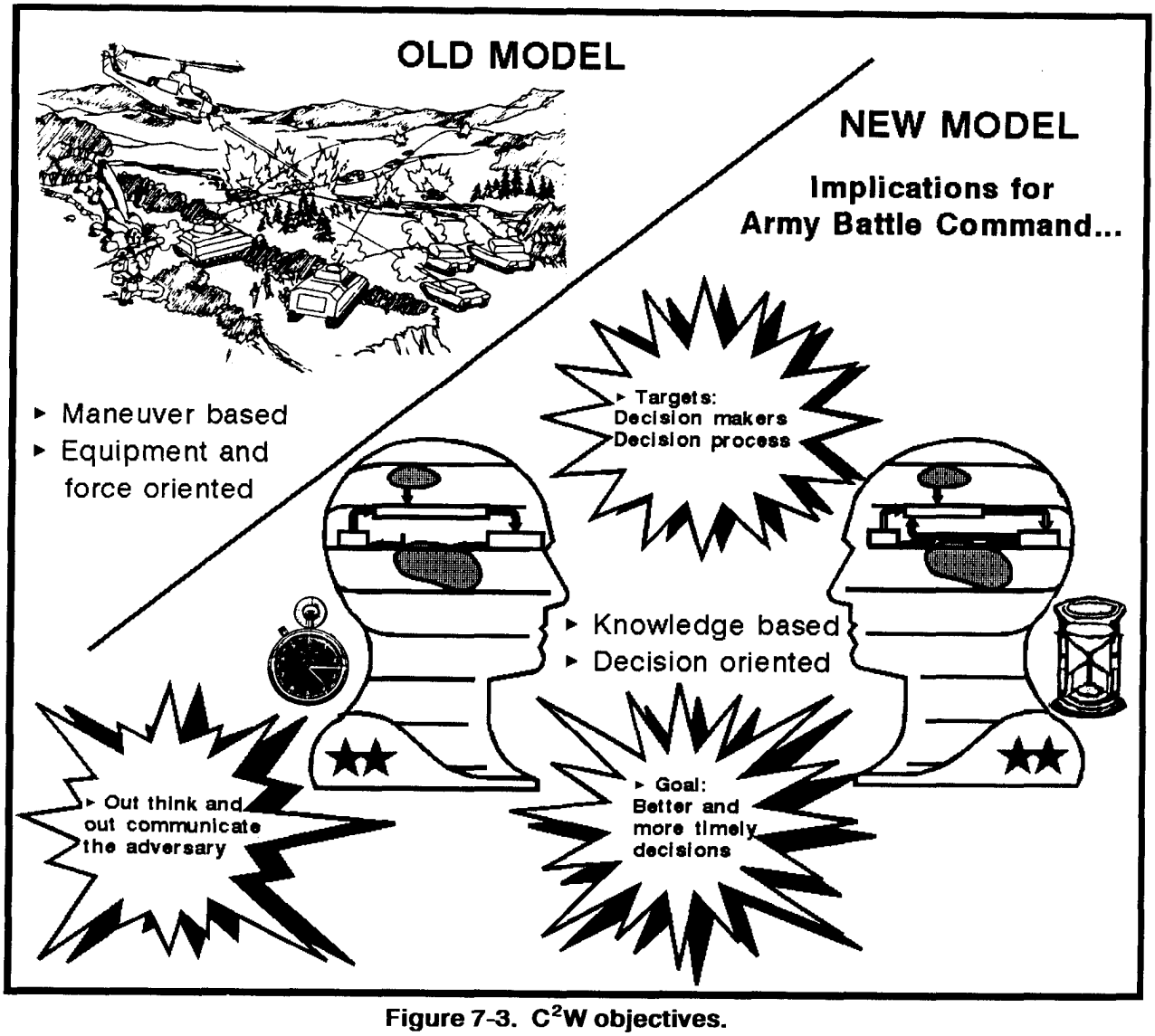

Figure 7-3. C^2W objectives.

C^2W is supported by an information system IPB. This form of IPB as shown in Figure 7-4, is the basis for developing C^2W COAS and targeting. The process builds upon the standard IPB but requires—

- Understanding the "art" of decision making and leadership.
- Knowledge of the technical requirements of a wide array of information systems.
- Ability to conduct highly technical processing to produce C^2W COA templates.

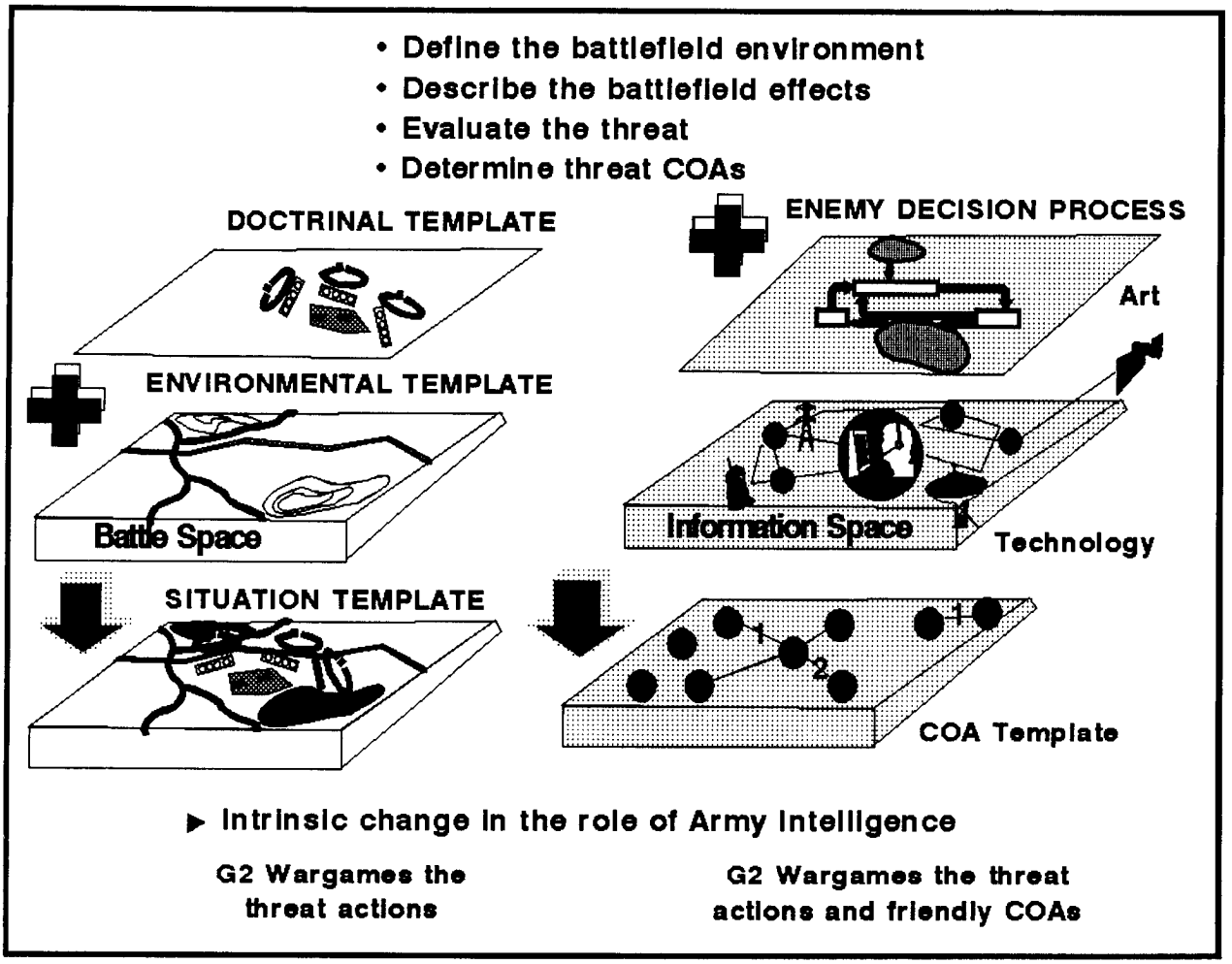

Figure 7-4. IPB of an information system.

The effectiveness of C^2W operations is predicated on a thorough understanding and assessment of the enemy's capabilities from equipment through his decision making process.

The Intelligence BOS is an operational tool that creates and exploits vulnerabilities in the enemy battle command. IEW is an operator in C^2W and information operations. From conventional and information system IPB, developing C^2W COAs, supporting information operations, and assessing the effectiveness of C^2W operations, IEW has taken on an operational role in military operations.

The more capable Army of the future will still be based on a hierarchical force level command but will be empowered by fully digitized information management systems. The commander will drive information operations just as he drives the intelligence effort. He will use information operations to focus and leverage information to better command his force and apply the elements of combat power.